Figure 1. Manuscript identification for systematic review -5,728 excluded via title: Other 1,261 Other procedures 1,432 Non-surgical 515 7,371 titles or abstracts Other intervention or outcome 2,520 identified in initial search -1.132 excluded via abstract: editorial 11 -7,247 via literature search <2 years post operation 326 <80% follow-up 27 Other procedure 330 Non-English 74 -124 via bibliography search or Other outcome 239 Duplicate cohort 45 expert referral Pediatric patients 40 Sampling bias 19 BMI < 35 kg/m2 11 n<50 10 -184 review articles excluded after review journal article: Non-systematic 108 Other procedure 9 Pediatric patients 7 Other outcome 8 Includes <2 year outcomes or <80% follow-up 52 327 Clinical Studies -298 excluded after full review journal article: requiring review of journal Follow-up mean >2 years post operation, & range article includes patients <2 years post 70 Follow-up <80% of total cohort 105 BMI<35kg/m2 21 Other procedure 16 Nonconsecutive sampling 25 Duplicate data 4 Pediatric patients 3 editorial 1 n<50 31 Outcome of interest, but lacking adequate detail to assess fully 22 29 Clinical Studies included: -10 Randomized Controlled trials -1 Matched Cohort study Breakdown of 29 studies by reported outcome*: -6 Prospective Cohort studies -22 Weight loss -1 Retrospective Cohort study -6 Type 2 Diabetes improvement *4 studies -11 Case series studies -3 Hypertension improvement reported -4 Dyslipidemia improvement >1 outcome.